

## NOMENCLATURAL NOTES FOR THE NORTH AMERICAN FLORA. XIV.

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### ABSTRACT

The nomenclature and taxonomy of the following are discussed: *Aeonium haworthii*, *Aspidium alpestre*, *Athyrium alpestre*, *Braya glabella*, *B. purpurascens*, *Cardamine californica*, *C. integrifolia*, *Halimodendron halodendron*, *Huperzia occidentalis*, *Platanthera* × *keenanii*, *Platanthera zothecina*, *Platypetalum purpurascens*, *Prosopis odorata*, *Sarracenia purpurea*, *Sempervivum haworthii*, *Senecio cineraria*, *Spirolobium odoratum*, *Sporobolus aspera*, and *Sporobolus compositus*. The North American phytogeography of *Botrychium pumicola* and *Ophioglossum azoricum* is discussed. Four new combinations and one *status novum* are proposed: *Sporobolus compositus* var. *drummondii* (Trin.) Kartesz & Gandhi, *comb. nov.*; *Sporobolus compositus* var. *macer* (Trin.) Kartesz & Gandhi, *comb. nov.*; *Tetranuris acaulis* var. *epunctata* (A. Nelson) Kartesz & Gandhi, *comb. nov.*; *Tetranuris acaulis* var. *nana* (Welsh) Kartesz & Gandhi, *comb. nov.*; *Ceanothus greggi* A. Gray ssp. *franklinii* (Welsh) Kartesz & Gandhi, *stat. nov.*

KEY WORDS: Floristics, Nomenclature, Asteraceae, Brassicaceae, Crassulaceae, Dryopteridaceae, Fabaceae, Lycopodiaceae, Ophioglossaceae, Orchidaceae, Poaceae, Rhamnaceae, Sarraceniaceae, *Aeonium*, *Athyrium*, *Botrychium*, *Braya*, *Cardamine*, *Ceanothus*, *Dentaria*, *Halimodendron*, *Huperzia*, *Hymenoxys*, *Ophioglossum*, *Platanthera*, *Prosopis*, *Rhamnus*, *Sarracenia*, *Senecio*, *Sporobolus*, *Tetranuris*

### Introduction

Continuing with the "NOMENCLATURAL NOTES FOR THE NORTH AMERICAN FLORA" (Kartesz & Gandhi 1989, 1990a, b, c, 1991a, b, c, d,

1992a, b, c, d, 1994), a fourteenth note in the series is presented here toward advancing our understanding of North American plants.

In some instances, the nomenclature in this and subsequent notes may serve to update, and differ from the taxonomy and nomenclature presented in Kartesz (1994), which for the most part concluded midway in 1992, and thus did not assess those names in the recently published *The Jepson Manual* (Hickman 1993).

## ASTERACEAE

### *Senecio*

*Senecio cineraria* DC., a ligneous-based, Mediterranean perennial, commonly known as Dusty Miller, frequently persists after cultivation in North America. Welsh *et al.* (1993, p. 251) cite Linnaeus as the author of this taxon. We found this attribution errant, and assert that De Candolle is the correct author. Furthermore, we follow Chater in treating *S. cineraria* as a subspecific expression of *S. bicolor*, as given below.

*Senecio bicolor* (Willd.) Todaro ssp. *cineraria* (DC.) Chater, Bot. J. Linn. Soc. 68:273. 1974. BASIONYM: *Senecio cineraria* DC., Prodr. 6:355. 1838.

### *Tetraneris*

Welsh *et al.* (1993, p. 232) recognize *Hymenoxys acaulis* (Pursh) Parker var. *epunctata* (A. Nelson) Cronquist (found in Colorado, Utah, and Wyoming) and var. *nana* Welsh (a Utah endemic). We accept these two varieties, but include *Hymenoxys acaulis* within the genus *Tetraneris*. This necessitates the following new combinations.

*Tetraneris acaulis* (Pursh) E. Greene var. *epunctata* (A. Nelson) Kartesz & Gandhi, *comb. nov.* BASIONYM: *Tetraneris epunctata* A. Nelson, Bot. Gaz. (Crawfordsville) 37:275. 1904. *Hymenoxys acaulis* (Pursh) Parker var. *epunctata* Cronquist, *Intermountain Fl.* 5:80. 1994.

*Tetraneris acaulis* (Pursh) E. Greene var. *nana* (Welsh) Kartesz & Gandhi, *comb. nov.* BASIONYM: *Hymenoxys acaulis* (Pursh) Parker var. *nana* Welsh, *Rhodora* 95:398. 1993.

## BRASSICACEAE

*Braya*

Traditionally, *Braya glabella* Richardson (published in 1823; see below) and *B. purpurascens* (R. Br.) Bunge ex Ledeb. (based upon *Platypetalum purpurascens* R. Br., published in 1823; see below) have been separated by fruit shape: *B. glabella* with linear to broadly oblong fruits and *B. purpurascens* with ellipsoid or oblong-ovoid fruits. Harris (1985, pp. 118-123, 135-148) considered these two elements as varietal expressions of a highly polymorphic complex (viz., *B. glabella* var. *glabella* and var. *purpurascens*), whereas Rollins (1993b, pp. 228-229) treated *B. purpurascens* as a synonym of *B. glabella*.

Although both names (*Braya glabella* and *Platypetalum purpurascens*) were published in 1823, Schulz (1924, pp. 230, 233) and Rollins (1993b) did not provide precise publication dates for these names. Stafleu & Cowan (1976, p. 367; 1983, p. 771) indicated that Brown's work (*Chlor. Melvill.*) was published in late 1823, whereas Richardson's work (*Bot. App.*) was published in Mar 1823. The accuracy of these two dates was verified by Harris (1985, p. 15), who stated that both Richardson and Brown referred to each other in their work; however, Richardson referred to Brown's unpublished manuscript; whereas Brown referred to Richardson's published work by quoting the precise page number. Therefore, the name *B. glabella* Richardson has priority over the name *Platypetalum purpurascens* R. Br.

Regarding the taxonomy of *Braya glabella* and *B. purpurascens*, we concur with Rollins (1993b) in treating *B. purpurascens* as a synonym of *B. glabella* (as given below).

*Braya glabella* Richardson, *Bot. App., Franklin's Narr. Jour. Polar Sea*, ed. 1. 743. Mar 1823.

*Platypetalum purpurascens* R. Br., *Chlor. Melvill.* 192. late 1823. *Braya purpurascens* (R. Br.) Bunge ex Ledeb., *Fl. Ross.* 1:195. 1842.

*Braya glabella* Richardson var. *purpurascens* (R. Br.) J.G. Harris (*nom. invalid*; unpublished to date).

*Cardamine* & *Dentaria*

The names *Dentaria californica* Nutt. and *D. integrifolia* Nutt., published in Torrey & Gray's 1838 work (see below), have equal priority. In two separate works, Greene transferred these two names to the genus *Cardamine* and made the combinations: *C. integrifolia* (Nutt.) E. Greene (published in 1887) and *C. californica* (Nutt.) E. Greene (published in 1891). In his 1887 work, Greene

included only *C. integrifolia*; however, in his 1891 work, he treated both taxa as distinct species.

Schulz (1903, p. 386) treated *Cardamine integrifolia* as *C. californica* prol. *integrifolia* (Nutt.) Schulz. Jepson (1925, p. 426) reduced *Dentaria californica* to varietal rank: *D. integrifolia* var. *californica* (Nutt.) Jepson. Detling (1936, p. 576) opted the reverse, making the combination *D. californica* var. *integrifolia* (Nutt.) Detling. By placing *D. integrifolia* as a synonym of *D. californica*, Munz & Keck (1959, p. 243) appear to be the first to "unite" these two names.

Although C.L. Hitchcock *et al.* (1964, pp. 469-470) accepted Jepson's reduction of these taxa, they recognized this complex within *Cardamine*, and thereby treated *C. californica* as a synonym of *C. integrifolia*. In their discussion, Hitchcock *et al.* remarked that Jepson was the first to reduce one name (i.e., *Dentaria californica*) to an infraspecific rank. However, in their discussion, they did not mention Schulz's treatment. Rollins (1993a, p. 44) made the combination *Cardamine californica* var. *integrifolia* (Nutt.) Rollins.

Regarding the choice of the epithet for the complex consisting of united taxa bearing names of equal priority, the name chosen by the author who first unites them is treated as having priority (ICBN Art. 11.5; Greuter 1994.). As stated above, Munz & Keck (1959) as well as Hitchcock *et al.* (1964) treated these two Nuttalean names as belonging to the same species, while other authors consistently recognized one as being an infraspecific taxon within the other. Nonetheless, recognition at infraspecific rank is sufficient to fulfill the requirement of Art. 11.5.

Since the term prol. (used by Schulz; see above) does not refer to an established taxonomic rank, some authors may quibble, whether he or Jepson deserves credit for the reduction or unification of the two Nuttalean names. In recent literature (excluding Hitchcock *et al.* 1964), the names *Cardamine californica* and *C. californica* var. *integrifolia* are widely used. If Schulz's treatment lacks nomenclatural standing, then the name *C. californica* might be rejected in favor of *C. integrifolia*.

In naming this complex as *Cardamine californica*, Schulz explicitly made a choice between two legitimate names of equal priority at the rank of species. Furthermore, within the *C. californica* complex, he included the type of *Dentaria integrifolia*. The fact that he used the name *D. californica* at an unconventional infraspecific rank (viz., *C. californica* prol. *integrifolia*) is irrelevant. Therefore, Schulz should receive credit for uniting the two names. Our assessment of this nomenclature has been corroborated by both Drs. Greuter (B) and Nicolson (US).

*Cardamine californica* (Nutt.) E. Greene, *Fl. Francisc.* 206. 1891. var. *californica*. BASIONYM: *Dentaria californica* Nutt. in Torrey & Gray, *Fl. N. Amer.* 1:88. 1838.

*Cardamine californica* (Nutt.) E. Greene var. *integrifolia* (Nutt.) Rollins, Harvard Pap. Bot. 4:44. 1993. BASIONYM: *Dentaria integrifolia* Nutt. in Torrey & Gray, *Fl. N. Amer.* 1:88. 1838. *Cardamine integrifolia* (Nutt.) E. Greene, Bull. Calif. Acad. Sci. 2:389. 1887. *Dentaria integrifolia* Nutt. in Torrey & Gray var. *californica* (Nutt.) Jepson, *Man. Fl. Calif.* 426. 1925. *Dentaria californica* Nutt. in Torrey & Gray var. *integrifolia* (Nutt.) Detling, *Amer. J. Bot.* 23:576. 1936.

## CRASSULACEAE

### *Aeonium haworthii* and *Sempervivum haworthii*

*Aeonium haworthii*, a native of the Canary Islands, has become established along sea cliffs and dunes in California. Some authors (Jackson 1895; Christ 1888) treat this taxon within *Sempervivum* L. as *S. haworthii*. Jackson attributed *A. haworthii* to Webb & Berth., whereas Kunkel (1980, p. 133) attributed it to (Salm-Dyck ex Webb & Berth.) Webb & Berth.; Hansen & Sunding (1985, p. 44), and Liu (1989, p. 80) to Salm-Dyck ex Webb & Berth.; and Moran (in Hickman 1993, p. 524) to Salm-Dyck alone. In their revised work, Hansen & Sunding (1993, p. 96) concurred with Kunkel on the authorship.

Regarding the authorship of *Sempervivum haworthii*, Jackson (1895), and Hansen & Sunding (1993, p. 273) cited it as Salm-Dyck ex Webb & Berth., whereas Liu (1989) cited it as (Webb & Berth.) Salm-Dyck ex Christ. Furthermore, Jackson treated *Aeonium haworthii* as a synonym of *S. haworthii*, whereas Liu as well as Hansen & Sunding did the reverse: treated *S. haworthii* as a synonym of *A. haworthii*.

Jackson (1895) and Liu (1989) stated that the name first appeared as *Sempervivum haworthii* (*nom. nud.*) in a garden list prepared by Salm-Dyck in 1834. According to Jackson, Webb & Berthelot validated *S. haworthii*; however, Liu stated that Webb & Berthelot accepted and validated *A. haworthii* in 1840, and that *S. haworthii* was validated by Christ in 1888.

In the protologue of *Aeonium haworthii*, Webb and Berthelot included a detailed Latin description and a caption for Tab. 34. They referenced to "*Sempervivum Haworthii*. Hortt. Argell. Cat. Hort. Dyck. pag. 253. sine descriptione." Furthermore, Webb & Berthelot did not ascribe *A. haworthii* to Salm-Dyck, but ascribed to "Nob." (Nob. is an abbreviated Latin term for *nobis*, meaning "to us," i.e., to Webb & Berthelot in this case. *Nobis* is a pronoun and a dative of the possessor to indicate the authors' responsibility for it.) Since the epithet-bringing synonym (*S. haworthii* in this case) was cited in the protologue, some authors, such as Liu, include "Salm-Dyck ex" in the authorship of *A. haworthii*. However, ICBN Art. 46.3 (Greuter 1994)

excludes such authorships ("... ascription is the direct association of the name of a person or persons with a new name or description or diagnosis of a taxon. Mention of an author's name in a list of synonyms is not ascription ..."). In light of this situation, we exclude Salm-Dyck from the authorship of *A. haworthii*. Hansen (C; pers. comm.) also asserted that Salm-Dyck should be excluded from the authorship of *A. haworthii*.

With reference to the authorship of *Sempervivum haworthii*, we found that Christ (1888), who treated *Aeonium* as a sectional name within *Sempervivum* and made the combination *S. haworthii*, referenced Webb & Berthelot as: "*S. haworthii* Webb Teneriffae Teno 1. b. Hillebr. *Phyt. I. Tab. 34.*" Based on ICBN Art. 46, Ex. 10 and 11 (Greuter 1994), we assert that Christ merely provided an indirect reference to the basionym *Aeonium haworthii* Webb & Berth., and ascribed the new combination *S. haworthii* to neither Salm-Dyck nor Webb & Berthelot.

*Aeonium haworthii* Webb & Berth., *Hist. Nat. Isles Canaries* 3(2). *Phyt. Canar. Sect. 1*(livr. 53):193. 1840. *Sempervivum haworthii* [hort. ex Salm-Dyck, *Hort. Dyck.* 253. 1834, *nom. nud.*; ex Webb & Berth., *Hist. Nat. Isles Canaries* 3(2). *Phyt. Canar. Sect. 1*(livr. 53):193. 1840, *pro. syn.*] (Webb & Berth.) Christ, *Bot. Jahrb. Syst.* 9:118, 161. 1888.

## DRYOPTERIDACEAE

### *Athyrium*

Smith (in Flora of North American Editorial Committee 1993, p. 256) provided the treatment of the family Dryopteridaceae for the flora of North America (north of México). In this treatment, Smith cited *Athyrium distentifolium* Tausch ex Opiz as a synonym of *A. alpestre* (Hoppe) Clairville (based on *Aspidium alpestre* Hoppe).

Regarding the nomenclature of the above complex, we (Phytologia 70:196-197. 1991.) followed Fuchs' (1974) conclusion on the taxonomy and nomenclature. We stated that *Aspidium alpestre* Hoppe is possibly an illegitimate name, that Milde is the author of *Athyrium alpestre* (based on the type of *Aspidium alpestre*), and that *Athyrium alpestre* Clairville is *Athyrium feliz-femina* (L.) Roth (i.e., not based on the type of *Aspidium alpestre*). Furthermore, we concluded that *Athyrium distentifolium* is the next available legitimate name for the above complex. Our previous nomenclatural citation is repeated below.

*Athyrium distentifolium* Tausch ex Opiz, *Kratos* 2(1):14, no. 41. 1820. TYPE:  
"Tausch ... 'no. 1833 *Polypodium rhaetium* L. Brunberg in Riesengeb.'  
" (fide Fuchs 1974).



*Athyrium alpestre* Milde, *Fil. Eur.* 53, no. 2. 1867, non Clairville 1811.

*Aspidium alpestre* Hoppe, *Neues Bot. Taschenb. Anfanger Wiss. Apothek-erkunst.* 216, no. 11. 1805, nom. *superfl.*

## FABACEAE

### *Halimodendron halodendron*

*Halimodendron halodendron* (Salt-tree), a native of southwestern Asia, based on *Robinia halodendron*, has become established as a noxious weed in California. Several authors, such as Jackson (1895), Greuter (1989), and Wiersema (1990) attribute the basionym to Pallas, whereas Isely (in Hickman 1993, p. 610) attributes it to Linnaeus.

From our study, we assert that Isely's attribution of the name *Robinia halodendron* to Linnaeus is incorrect, and that Pallas is the correct author of this name.

*Halimodendron halodendron* (Pallas) Voss in Siebert & Voss, *Vilm. Blumen Gartneri*, ed. 3. 1: Index 35. 1896. BASIONYM: *Robinia halodendron* Pallas, *Reise Russ. Reich.* 2:741, t. W. 1773.

### *Prosopis*

Welsh *et al.* (1993, p. 451) attribute the name *Prosopis odorata* to "(Torr. & Frem.) Torr. & Frem." Regarding the authorship, they state the following:

"Although the formal proposal of *Prosopis odorata* by Torrey & Frémont (*Rep. Explor. Exped. Oregon & California* 313. 1845) ... has been rejected, the species is adequately characterized and typified on p. 260 of that report. The disposition in the botanical appendix is regarded as an inadvertent new combination of *Spirolobium odoratum*."

Frémont's (1845) work *Report of the Exploring Expedition to the Rocky Mountains in the year 1842 and to Oregon and North California in the years 1843-44* consists of two reports [A Report of an Exploration of the Country lying between the Missouri River and the Rocky Mountains on the line of the Kansas and Great Platte Rivers (pp. 7-101) and A Report of the Exploring Expedition to Oregon and North California in the years 1843-44 (pp. 105-294) both by Frémont] and an appendix (sections A & B by James Hall; section C by Torrey & Frémont), with continuous pagination (319 pages). On p. 260, the following account is given on *Spirolobium odoratum*:

"Here a singular and new species of acacia, with spiral pods or seed vessels, made its first appearance; becoming henceforward, for a considerable distance, a characteristic tree. It was here comparatively large, being about 20 feet in height, with a full and spreading top, the lower branches declining towards the ground. It afterwards occurred of smaller size, frequently in groves, and is very fragrant. It has been called by Dr. Torrey *Spirolobium odoratum*."

For this legume, Torrey & Frémont (pp. 313-314) published the name *Prosopis odorata*, provided a detailed description, and rejected the genus *Spirolobium*.

It is explicit that the description of the legume found on p. 260 was provided by Frémont, and he did not indicate his acceptance of the name *Spirolobium odoratum*; hence, this name was invalidly published on p. 260. Furthermore, even if this name were to be published validly on that page, it was replaced by *Prosopis odorata* on pp. 313-314. Since the two reports and the appendix constitute a single publication of Frémont's work, the name *S. odoratum* was never validly published in that work. We assert that Torrey & Frémont published the name *Prosopis odorata* as a new species (not as a new combination); hence, parenthetical authorship should not be cited. We relegate *P. odorata* as a synonym of *P. glandulosa* var. *torreyana* as given below.

*Prosopis glandulosa* Torr. var. *torreyana* (L. Benson) M.C. Johnston, Brittonia 14:82. 1962.

*Prosopis odorata* Torr. & Frém. in Frém., Rep. Exped. Rocky Mts. 313. 1845.

## LYCOPODIACEAE

### *Huperzia*

Beitel (Amer. Fern J. 82:46. 1992.) made the combination *Huperzia occidentalis* (based on *Lycopodium lucidulum* Michx. f. *occidentale* Clute). His combination was also used by Wagner & Beitel (in Flora of North America Editorial Committee 1993, p. 23). Unfortunately, both Wagner & Beitel were apparently unaware that this combination was made earlier by Kartesz & Gandhi (see below). Beitel's combination should be considered to be an isonym.

*Huperzia occidentalis* (Clute) Kartesz & Gandhi, Phytologia 70:201. 1991.;  
Beitel, Amer. Fern J. 82:46. 1992.



## OPHIOGLOSSACEAE

### *Botrychium*, *Ophioglossum*

In our cursory assessment of the Ophioglossaceae treatment by Wagner & Wagner (in *Flora of North America* Editorial Committee 1993, pp. 85-106), we report the following in *Botrychium* and *Ophioglossum*.

Wagner & Wagner (1993, p. 100) attribute the name *Botrychium pumicola* to "Coville in Underwood." In our study, we found that Underwood neither indicated that Coville provided the description nor stated that he was publishing the name for Coville. In such a circumstance, the correct authorship is Coville *ex* Underwood (fide *ICBN* Art. 46.4; Greuter 1994.).

*Botrychium pumicola* Coville *ex* Underwood, *Native Ferns*, ed. 6. 69. 1900.

Although we will not elaborate here on other distributional records [which the Biota of North America Program (BONAP) has completed], we should note that Wagner & Wagner report *Botrychium pumicola* endemic to Oregon, yet their distribution map, given on the same page, has an arrow pointing to an area in southeastern Greenland. As is reflected in the BONAP database, this species is indeed an Oregon endemic.

Furthermore, according to Bay (Nord. J. Bot. 13:251. 1993.), *Ophioglossum azoricum* was reported for Greenland by Kliim-Nielsen & Pedersen (*Grønlands Varme Kilder*. - *Naturens Verden* 1, pp. 4-15. 1974.). However, this species does not appear in Wagner & Wagner's (1993, pp. 102-105) treatment of this genus. If authenticated, the Greenland report of this taxon would represent the only known record for North America.

## ORCHIDACEAE

### *Platanthera*

Brown (1993, p. 189) published *Platanthera* × *keenanii* P.M. Brown as a *hyb. nov.* at specific rank. Regarding the validity of *P.* × *keenanii*, our analysis follows.

Although Brown mentioned the presumed parentage of *Platanthera* × *keenanii* (i.e., *P. grandiflora* Bigelow × *P. lacera* [Michx.] G. Don), cited a type, and provided a brief diagnosis in English, he neither provided nor referenced a Latin diagnosis or description. According to *ICBN* Art. H.10.1 (Greuter 1994), "Names of nothotaxa at the rank of species or below must conform with the provisions (a) in the body of the *Code* applicable to the same rank . . ." These requirements are also reinforced in Art. 40.1 ("In order to be validly published, names of hybrids of specific or lower rank with Latin epithets must comply

with the same rules as names of non-hybrid taxa of the same rank"). Furthermore, Art. 40 Ex. 1-3 illustrate the rejection of some hybrid names for the lack of a Latin description or diagnosis.

The requirements of Latin diagnosis and type citation are waived only if one were to publish formulae (i.e., not true epithets); however, Brown published *Keenanii* as an epithet. We conclude that the name *Platanthera* × *keenanii* was invalidly published.

*Platanthera* × *keenanii* P.M. Brown, *Field & Study Guide to the Orchids of New England & New York* 189. 1993 (*nom. invalida*).

Note: Furthermore, Catling & Catling (1994, pp. 19-32), who used the name *Platanthera* × *keenanii* in a qualitative and quantitative analysis, also failed to realize its invalidity.

Also in Catling & Sheviak (1993), the "new combination *Platanthera zothecina* (Higgins & Welsh) Catling & Sheviak" was already made by Kartesz & Gandhi (see below). Catling & Sheviak's "new combination" should be considered to be an isonym.

*Platanthera zothecina* (Higgins & Welsh) Kartesz & Gandhi, *Phytologia* 69:134. 1990.; Catling & Sheviak, *Lindleyana* 8:81. 1993.

## POACEAE

### *Sporobolus*

Kunth based his *Sporobolus aspera* (published in 1829; see below) on *Agrostis aspera* Michx. Unfortunately, *A. aspera* is later homonym and illegitimate; hence, Michaux should not be cited as a parenthetical author for any combination based on *A. aspera*. For this illegitimate name, Palisot Beauvois (1812) published a new combination: *Vilfa aspera*. Since *V. aspera* is the first legitimate name based on the type of *A. aspera*, all subsequent new combinations based on the preceding type, should include P. Beauvois as the parenthetical author. Therefore, P. Beauvois is the parenthetical author for *S. aspera*.

Prior to P. Beauvois' 1812 publication, Poiret published the name *Agrostis composita* in 1810, which was transferred to *Sporobolus* by Merrill (1901). Presently, *S. aspera* (with priority from 1812) and *S. compositus* (with priority from 1810) are considered to represent but a single taxon (Hitchcock & Chase 1951, p. 962; Riggins 1977, p. 309). Riggins remarked that "Although the type of *A. composita* has not been located, there is little doubt that Poiret's description pertains to *S. aspera* var. *aspera*."

We recognize two non-typical expressions within *Sporobolus aspera*: var. *drummondii* (Trin.) Vasey and var. *macer* (Trin.) Hitchc. The transfer of these two varieties to *S. compositus* necessitates two new combinations (given below).

*Sporobolus compositus* (Poir.) Merr., Circ. Div. Agrostol. U.S.D.A. no. 35:6. 1901. BASIONYM: *Agrostis composita* Poir. in Lam., *Encycl. Sup.* 1:254. 1810. TYPE: U.S.A. Carolina: *Bosc* (not located).

*Vilfa aspera* P. Beauv., *Ess. Agrostogr.* 16, 147, 181. 1812. *Sporobolus aspera* (P. Beauv.) Kunth, *Revision Gram.* 1:68. 1829. *Agrostis aspera* Michx., *Fl. Bor.-Amer.* 1:52. 1803, non Web. (*Prim. Fl. Hols. Suppl.* 6:4. 1787.).

*Sporobolus compositus* (Poir.) Merr. var. *drummondii* (Trin.) Kartesz & Gandhi, *comb. nov.* BASIONYM: *Vilfa drummondii* Trin., Mem. Acad. Imp. Sci. Saint-Petersbourg, Ser. 6. Sci. Math., Seconde pt., Sci. Nat. 4(1):106. 1840. *Sporobolus drummondii* (Trin.) Vasey, *Descr. Cat. Grasses U.S.* 44. 1885. *Sporobolus asper* (P. Beauv.) Kunth var. *drummondii* (Trin.) Vasey, *Contr. U.S. Natl. Herb.* 3:60. 1892.

*Sporobolus compositus* (Poir.) Merr. var. *macer* (Trin.) Kartesz & Gandhi, *comb. nov.* BASIONYM: *Vilfa macra* Trin., Mem. Acad. Imp. Sci. Saint-Petersbourg, Ser. 6. Sci. Math., Seconde pt., Sci. Nat. 4(1):79. 1840. *Sporobolus macer* (Trin.) Hitchc., *Amer. J. Bot.* 2:303. 1915 ("macrus"). *Sporobolus asper* (P. Beauv.) Kunth var. *macer* (Trin.) Shinnors, *Rhodora* 56:29. 1954.

## RHAMNACEAE

### *Ceanothus*

In his 1993 work, Welsh published *Ceanothus greggi* var. *franklinii*. We accept this taxon, but at subspecific rank. Therefore, we elevate var. *franklinii* to subspecific rank, which necessitates a new combination.

*Ceanothus greggi* A. Gray ssp. *franklinii* (Welsh) Kartesz & Gandhi, *stat. nov.* BASIONYM: *Ceanothus greggi* A. Gray var. *franklinii* Welsh, *Rhodora* 95:413. 1993. TYPE: U.S.A. Utah: San Juan Co., T41S, R17E, S12, Muley Point, at 1891 m, rimrock, pinyon-juniper community, Ceder Mesa Sandstone, 8 Jun 1983, *S.L.*, *B.T.*, & *M.L. Welsh* 22244 (HOLOTYPE: BRY).

## SARRACENIACEAE

*Sarracenia purpurea*

For the short-leaved, red-veined, and narrow-petaled Newfoundland expressions of *Sarracenia purpurea* L., La Pylaie (Mem. Soc. Linn. Paris 6:389. 1827.) published a new varietal name: *Sarracenia purpurea* var. *terrae-novae*. Rafinesque (*Autikon Botanikon* 33. 1840.) separated the northern (Canada to Virginia) and southern expressions (Virginia to Florida) of this complex as *S. gibbosa* Raf. and *S. venosa* Raf., respectively. Wherry (1933, p. 3) recognized the northern and southern expressions at subspecific rank within *S. purpurea*: ssp. *gibbosa* (Raf.) Wherry and ssp. *venosa* (Raf.) Wherry. By doing so, Wherry automatically created the typical ssp. *purpurea*. Unfortunately, he erred by not assigning either expression to ssp. *purpurea*.

McDaniel (1971, p. 26), who declined to recognize infraspecific taxa within the *Sarracenia purpurea* complex, lectotypified *S. purpurea* by t. 70 of Catesby's *Natural History of Carolina, Florida, and Bahamas*. Furthermore, McDaniel stated that if one were to recognize infraspecific ranks within this complex, then the southern expressions would represent the typical *S. purpurea*, and the northern expressions ought to be called either var. *terrae-novae* (at varietal rank) or ssp. *gibbosa* (at subspecific rank). McDaniel's typification affects the application of the name *S. purpurea* ssp. *venosa*.

In contrast to McDaniel's treatment, Wherry (1972, pp. 146-147) assigned the northern expressions to ssp. *purpurea* (incl. ssp. *gibbosa*) and the southern expressions to ssp. *venosa*. His treatment was widely followed by authors, such as Schnell (1993, pp. 6-10) and Gleason & Cronquist (1993, p. 153).

Reveal (1993, p. 181) indicated that a rejection of McDaniel's typification, and a retypification of *Sarracenia purpurea* (sensu Wherry) by conservation is not possible, since the affected name is at the subspecific rank, and thereby ICBN Arts. 14.1, 14.9 (Greuter 1994) do not apply. Reveal's statement inferred that he did not approve McDaniel's typification, but no further action could be taken with the existing *Code*. Furthermore, Reveal believed that "if one were to recognize the taxon (expressions) at subspecific rank, a new combination is necessary."

We concur with Reveal's analysis on McDaniel's typification, but assert that no new combination is necessary if one were to recognize the northern expression at subspecific rank (since a name at subspecific rank, i.e., ssp. *gibbosa*, was already established). For the North American flora, we recognize the classification given below.

*Sarracenia purpurea* L. *Sp. Pl.* 510. 1753.

*Sarracenia purpurea* L. ssp. *gibbosa* (Raf.) Wherry, *Bartonia* 15:3. 1933.

(northern expression). BASIONYM: *Sarracenia gibbosa* Raf., *Aut. Bot.* 33. 1840.

*Sarracenia heterophylla* Eaton, *Man.* ed. 4. 445. 1824. *Sarracenia purpurea* L. var. *heterophylla* (Eaton) Torr., *Rep. Bot. Dep. Surv. New York Assembly No. 50:120.* 1839; Britton, *Mem. New York Bot. Gard.* 4:176. 1895.

*Sarracenia purpurea* L. var. *novae-terrae* de la Pylaie, *Ann. Soc. Linn. Paris* 4:389. 1827.

*Sarracenia purpurea* L. var. *stolonifera* Macfarlane & D.W. Steckbeck, *Kew Bull.* 165. 1933.

*Sarracenia purpurea* L. var. *ripicola* Boivin, *Canad. Field Naturalist* 65:21. 1951.

Note: Britton (1895), probably unaware of Torrey's new combination (*Sarracenia purpurea* var. *heterophylla*), proposed it again in his 1895 work. His new combination should be construed as an isonym.

*Sarracenia purpurea* L. ssp. *purpurea* (southern expression, with two varieties)

*Sarracenia purpurea* L. var. *burkii* Schnell, *Rhodora* 95:8. 1993.

*Sarracenia purpurea* L. var. *purpurea*. LECTOTYPE (*vide* McDaniel 1971): t. 70 of Catesby's *Nat. Hist. Carolina*.

*Sarracenia venosa* Raf., *Aut. Bot.* 33. 1840. *Sarracenia purpurea* L. ssp. *venosa* (Raf.) Wherry, *Bartonia* 15:3. 1933.

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